Claims

1-9   Canceled

10.   (New) A motorcycle brake system comprising:

one hydraulically operable front-wheel brake circuit;

a manually operable master brake cylinder connected to the front-wheel brake circuit and in communication with a brake fluid supply tank; and

at least one inlet valve and outlet valve that can be activated for brake slip control in the front-wheel brake circuit, wherein in a brake slip control operation, a pressure buildup in the front-wheel brake circuit (2) is determined, depending on a switching position of the inlet and outlet valves (21,22), by a brake fluid volume which is available in the master brake cylinder (7) and displaceable exclusively manually into the front-wheel brake circuit (2), and the brake fluid volume prevailing in the master brake cylinder (7) is monitored to prevent exhaustion of the brake fluid volume.

11.   (New) A motor cycle brake system according to claim 10, wherein a travel sensor (10) is provided in the master brake cylinder to sense a position of a working piston, that displaces the brake fluid into the front-wheel brake circuit, in the master brake cylinder to monitor the brake fluid volume prevailing in the master brake cylinder.

12.   (New) A motor cycle brake system according to claim 11, wherein in order to evaluate signals of the travel sensor (10), an evaluating circuit includes an electronic control device (24) in which, depending on a result of evaluation, modification of control algorithms intended for the inlet and outlet valves (21, 22) can be performed in such a manner that, with the decrease of brake fluid volume in the master brake cylinder (7), the volume consumption in the master brake cylinder (7) is minimized by appropriate switching of the inlet and outlet valves (21, 22)..

13   (New) A motor cycle brake system according to claim 12, wherein the brake fluid volume available in the master brake cylinder (7) can be reduced during brake slip control to a reserve volume that is needed for the minimum braking deceleration, and in that the brake slip control for the front-wheel brake circuit (2) initiated by the control device (24) is discontinued when the reserve volume is reached.

14.   (New) A motor cycle brake system according to claim 11, wherein the master brake cylinder (7) is structurally grouped with the supply tank (19), the travel sensor (10) and the inlet and outlet valves (21, 22) to form an independently manageable, operable front-wheel brake unit (8), and for pressure buildup in a brake slip control operation, the front-wheel brake unit (8) can be operated exclusively by means of a hand brake lever (12) or brake pedal that acts on the master brake cylinder (7).

15.   (New) A motor cycle brake system according to claim 10, wherein a rear-wheel brake circuit (4) operable independently of the front-wheel brake circuit (2) is provided, which can be operated mechanically and/or hydraulically, wherein there is a direct force-proportional mechanical and/or hydraulic connection between a manually operable brake lever or brake pedal (11) and a wheel brake (14) of the rear-wheel brake circuit (4).

16.   (New) A motor cycle brake system according to claim 10, wherein the inlet valve (21) is arranged for brake pressure buildup in a hydraulic connection between the master brake cylinder (7) and the front-wheel brake circuit (2), and in that the outlet valve (22) is provided for brake pressure reduction into the supply tank (19) in a parallel connection to the inlet valve (21) between the front-wheel brake circuit (2) and the brake fluid supply tank (19).

17.   (New) A motor cycle brake system according to claim 10, wherein the control device (24) forms an integral component of the front-wheel brake unit (8) which is

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preferably slipped onto the inlet and outlet valves (21, 22) for electrical contacting.

18. (New) A motor cycle brake system according to claim 10, wherein the front-wheel brake unit (8) includes a holding portion with a through-bore (25) for attachment at a steering rod (25) or at a motorcycle frame (26).